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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,327

02/17/2004

Yan Wang

944-003.103-2

9418

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7590

04/08/2008

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EXAMINER

CHO, HONG SOL

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

04/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/781,327	Applicant(s) WANG ET AL.	
	Examiner HONG CHO	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 11, 29, 32, 39, 58 and 61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 11, 29, 32, 39, 58 and 61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment filed on 03/03/2008. Claims 1, 4, 11, 29, 32, 39, 58 and 61 are pending in the instant application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 29, 58 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiorini et al (US 6760596), hereinafter referred to as Fiorini, in view of Yano et al (US 6501789), hereinafter referred to as Yano.

Re claims 1, 29, 58 and 61, Fiorini discloses measuring a carrier-signal-to-interference-signal level (C/I) (*predetermined parameter, signal-to-interference ratio* as in claims 58 and 61) of an uplink as a function of time (*determining that a fluctuation of a predetermined parameter related to a radio link channel transmission exists*, figure2; column 5, lines 45-49). Fiorini discloses comparing a transmit power to two different thresholds (column 5, lines 62-65) and changing uplink-transmit bit rate by changing a

spreading factor (column 2, lines 21-23) to keep the transmit power between two thresholds (column 5, line 66 to column 6, line 5) (*changing a spreading factor used for uplink channel spreading to counteract said fluctuation in order to keep a predetermined parameter related to said fluctuation substantially near a threshold value by increasing or decreasing said spreading factor*). Fiorini discloses adjusting C/I by adjusting a spreading factor to ensure a desired frame or block error rate to maintain acceptable link quality (*changing the spreading factor if frame or block error rate meets a selected criterion*, (column 1, lines 43-52; column 2, lines 21-25). Fiorini fails to disclose changing spreading factor if said frame or said block error rate meets a selected criterion. Yano discloses measuring bit error rate of the uplink along with spreading factor (column 6, lines 30-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fiorini with the teaching of Yano for the benefit of setting a target E_b/N_0 which achieves a desired bit error rate.

Claims 4, 11, 32 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiorini in view of Yano and further in view of Sadri (US 6690652).

Re claims 4, 11, 32 and 39, Fiorini and Yano disclose all of the limitations of the base claim, but fail to disclose changing a spreading factor by receiving a spreading factor control signal from the network followed by the mobile station changing the spread factor. Sadri discloses changing a spreading factor (SF) based on a threshold set by the BS or changing transmit power level (transmit power control signal in claims 11 and 39) (column 7, lines 63-65; column 8, lines 6-15). It would have been obvious to one having

ordinary skill in the art at the time the invention was made to modify the system of Fiorini and Yano with the teaching of Sadri in receiving SF or power control signal so that power level for uplink transmission would be controlled by a network or base station.

Response to Arguments

4. Applicant's arguments filed on 03/03/2008 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Art Unit: 2619

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hong Cho/

/H. C./

Hong Cho
Patent Examiner
04/01/2008